



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,448	01/12/2004	Richard W. Adkisson	200313791-1	2136

22879 7590 04/27/2007
HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER
SCHNEIDER, JOSHUA D

ART UNIT	PAPER NUMBER
2182	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/756,448

Applicant(s)

ADKISSON ET AL.

Examiner

Joshua D. Schneider

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 5-10, 15 and 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 11-14, and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 1/26/2007 have been fully considered but they are not persuasive.
2. Applicant argues that Spangle does not teach every element or aspect of the claimed invention. Applicant's characterization of Spangle aside, the contrast asserted by that Applicant does not appear to exist, or to actually be applicant's invention, as the instant application lacks a teaching of the limitation that applicant asserts. Spangle does teach that the data is drawn from a single point and delivered to another single point, but the added limitation "in transit to the data output from any source" does not have antecedent basis in Applicant's specification, nor does it require even the possibility that the data be drawn from multiple sources. There is also a written description problem, as there is no teaching in the specification of the newly added limitation, and it is unclear how it would be possible to receive data from any source.
3. Further, Applicant has failed to distinguish between the teachings of the references and the claims. Applicant arguments are largely conclusory statements about the reference, that fail to address what are clear teaching of switching mode in order to optimize delivery in language that is certainly analogous to the instant claim language (see paragraph 6, and claims 1, 5, 6, 10, and 11).
4. Applicant's assertion that Spangle teaches away is also incorrect, as it relies on a common, though incorrect assumption about what teaching away requires. Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971).

Art Unit: 2182

Furthermore, “[t]he prior art’s mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not *criticize, discredit, or otherwise discourage* the solution claimed....” *In re Fulton*, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004).

5. With regards to claim 11, Applicant argues that Giaimo is incompatible with multiplexed channels using the same devices for different channels. This argument is unclear and not persuasive, as it not clear how the arguments relate to any claim limitations. The argument does not make clear what elements of the claims are not found in the reference. Giaimo teaches multiplex communication (paragraphs 5 and 53). With regards to claim 13, Applicant notes that the claims require the delivery of data from a single source to a single output. It is unclear how this relates to the claims or the rejection given. An source is delivered to an output, and the claim does not have any limitation that are not taught.

6. With regards to claims 18-20, applicant attacks the references individually and does not address the combination rejection given. In response, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant also argues that there is no reason to combine, but does not address the given motivations.

Specification

7. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the

following is required: there is no teaching in the specification of data being “in transit to the data output from any source.” Appropriate correction is required.

8. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-4, 11-14 and 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. With regards to claims 1, 4, 11, and 13, it is unclear how the claimed systems are able receive and transmit from any source. It would seem clear that this limitation cannot be enabled in the manner that it now reads. The method cannot mean to claim that is able to transmit from “any” source, as not all sources are connected to this one system, nor are they compatible with this particular system, but it is not clear from this limitation what sources are intended.

12. Claims 2, 3, 12, 14, and 17-20 are rejected for incorporating the same rejected subject matter as the independent claims upon which they depend.

13. All further rejections and objections are made in light of the specification as best understood in light of the pervious objections and rejections.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2182

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. Claims 1-4 and 17 are rejected under 35 U.S.C. 102(a) as being anticipated by U.S.

Patent Application Publication 2003/0159008 to Sprangle et al.

16. With regards to claim 1, Sprangle teaches selecting a system performance parameter to be optimized (paragraphs 16 and 22), receiving at the data input a sequence of discrete data words (paragraphs 4-6), determining an optimum mode of delivery of the data words to the data output so as to optimize the selected performance parameter (paragraphs 16 and 22), and delivering the data words from the data input to the data output in the determined optimum mode (paragraphs 20-22).

17. With regards to claim 2, Sprangle teaches determining the optimum mode of delivery includes determining at least one of an optimum time and sequence of delivery of the data words (paragraphs 16 and 22).

18. With regards to claim 3, Sprangle teaches reordering the data words into a desired sequence before delivering the data words from the data input to the data output (paragraphs 20-22).

19. With regards to claim 4, Sprangle teaches selecting a system performance parameter to be optimized (paragraphs 16 and 22), receiving at the data input a sequence of discrete data words (paragraphs 4-6), determining an optimum sequence and time of the delivery of the data words to the data output so as to optimize the selected performance parameter (paragraphs 16 and 22), and

Art Unit: 2182

delivering the data words from the data input to the data output in the determined optimum sequence and time (paragraphs 20-22).

20. With regards to claim 17, Sprangle teaches receiving at the data input a sequence of discrete data words (paragraphs 20-22), and delivering each data word to the data output without regard to sequence and as soon as possible after the data word is received at the data input (paragraphs 21-23), whereby latency is minimized (paragraph 23).

21. Claims 11-14 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication 2004/0090924 to Giaimo et al.

22. With regards to claim 11, Giaimo teaches selecting a system performance parameter to be optimized for each channel (paragraph 8), receiving at the data input of each channel a sequence of discrete data words (paragraphs 20-25), determining an optimum mode of delivery of the data words to the data output so as to optimize the selected performance parameter for the associated channel (paragraph 8), and delivering the data words from the data input to the data output in the determined optimum mode for each channel (paragraphs 20-25).

23. With regards to claim 12, Giaimo teaches the mode of delivery is different for at least two of the plurality of data channels (paragraphs 25-26).

24. With regards to claim 13, Giaimo teaches selecting a system performance parameter to be optimized for each source (paragraph 8), receiving at the data input a sequence of discrete data words from each source (paragraphs 20-25), determining an optimum mode of delivery of the data words to the data output so as to optimize the selected performance parameter for the associated source (paragraph 8), and delivering the data words from the data input to the data output in the determined optimum mode for each source (paragraphs 20-25).

Art Unit: 2182

25. With regards to claim 14, Giaimo teaches the mode of delivery is different for at least two of the plurality of data sources (paragraphs 25-26).

Claim Rejections - 35 USC § 103

26. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

27. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2003/0159008 to Sprangle et al. in further view of U.S. Patent 6,912,598 to Bedarida et al.

28. With regards to claim 18, Sprangle teaches receiving at the data input a sequence of discrete data word (paragraphs 4-6). Sprangle fails to teach, but Bedarida teaches holding at least one of the data words first received at the data input in storage until additional data words comprising the data packet are received at the data input (column 1, lines 18-43), delivering the data words from storage to the data output as the additional data words comprising the data packet are received at the data input with minimal time gaps between said data words (column 1, lines 38-43), and delivering the additional data words substantially directly from the data input to the data output as soon as possible after the additional data words are received at the data input, whereby bandwidth is maximized (column 1, lines 38-43). It would have been obvious to one of ordinary skill in the art to combine the burst data transfers of Bedarida with the memory controller of Sprangle in order to maximize bandwidth by decreasing access times.

Art Unit: 2182

29. With regards to claim 19, Sprangle teaches receiving at the data input a sequence of discrete data word (paragraphs 4-6). Sprangle fails to teach, but Bedarida teaches holding each of the data words received in storage until all data words comprising the data packet have been received (column 1, lines 18-43), and delivering the data words from storage to the data output in the preselected sequence and with substantially no time gaps between the data words, whereby safety is maximized (column 1, lines 38-43). It would have been obvious to one of ordinary skill in the art to combine the burst data transfers of Bedarida with the memory controller of Sprangle in order to maximize bandwidth by decreasing access times.

30. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2003/0159008 to Sprangle et al. in further view of U.S. Patent Application Publication 2002/0018395 to McLaury.

31. With regards to claim 20, Sprangle teaches a data input for receiving a sequence of discrete data words (paragraphs 4-6), a data output to which data are delivered (paragraphs 20-22). Sprangle fails to teach, but McLaury teaches and at least one data storage element intermediate the data input and data output for storing individual data words for a determined time before delivery to the data output (Fig. 1, element 242, master input register), and at least one path for selectably delivering data to the data output by bypassing said data storage element (Fig. 1, element 242, bypass to output register). It would have been obvious to one of ordinary skill in the art to combine the memory bypass of McLaury with the memory controller of Sprangle in order to minimize delivery latency.

Conclusion

32. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua D. Schneider whose telephone number is (571) 272-4158. The examiner can normally be reached on M, T, Th, and F, 9-4:00.

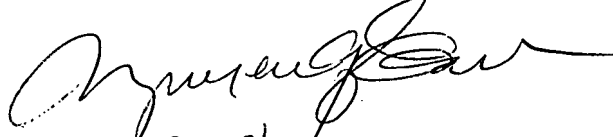
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2182

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JDS

TANH Q NGUYEN
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100



April 20, 2007